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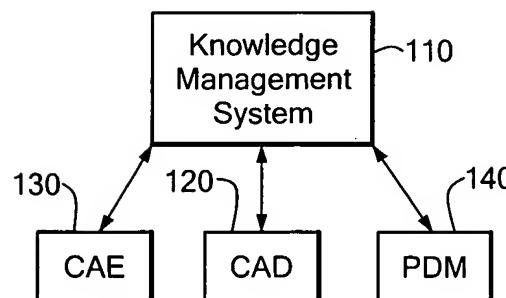


FIG. 1

100

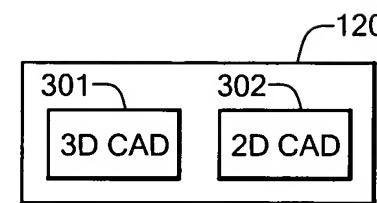


FIG. 3A

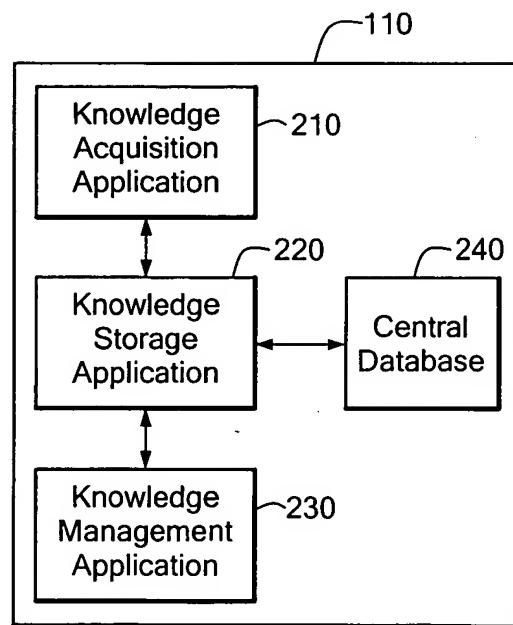


FIG. 2

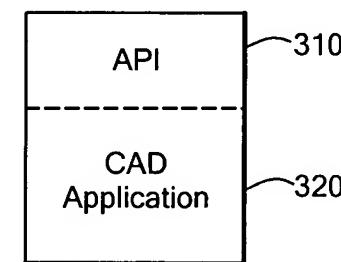


FIG. 3B

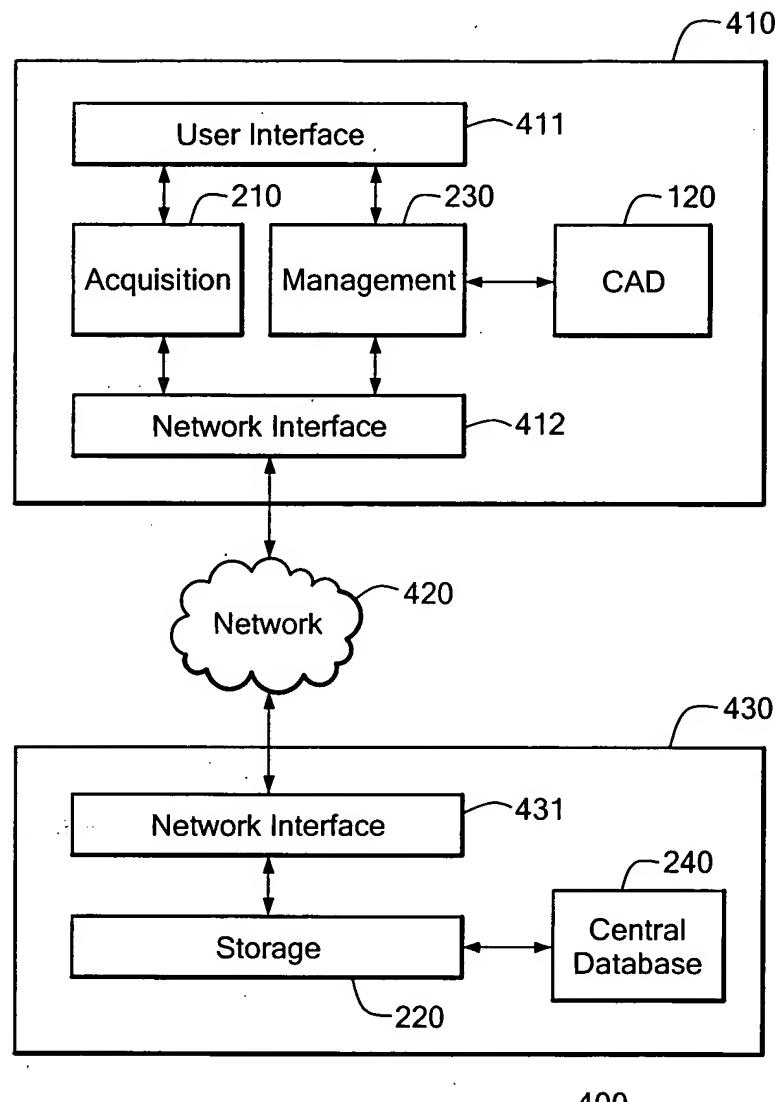
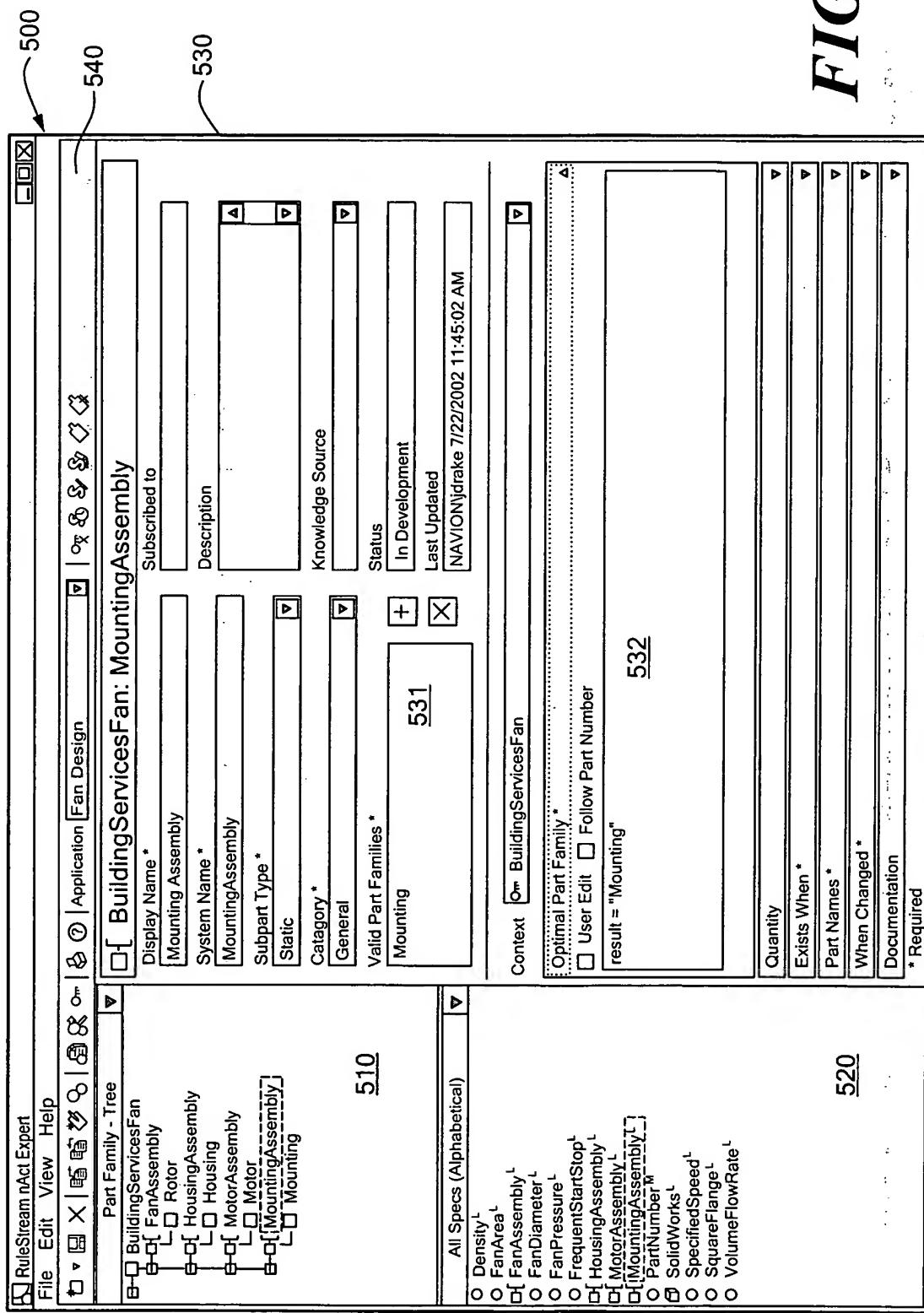


FIG. 4

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FIG. 5



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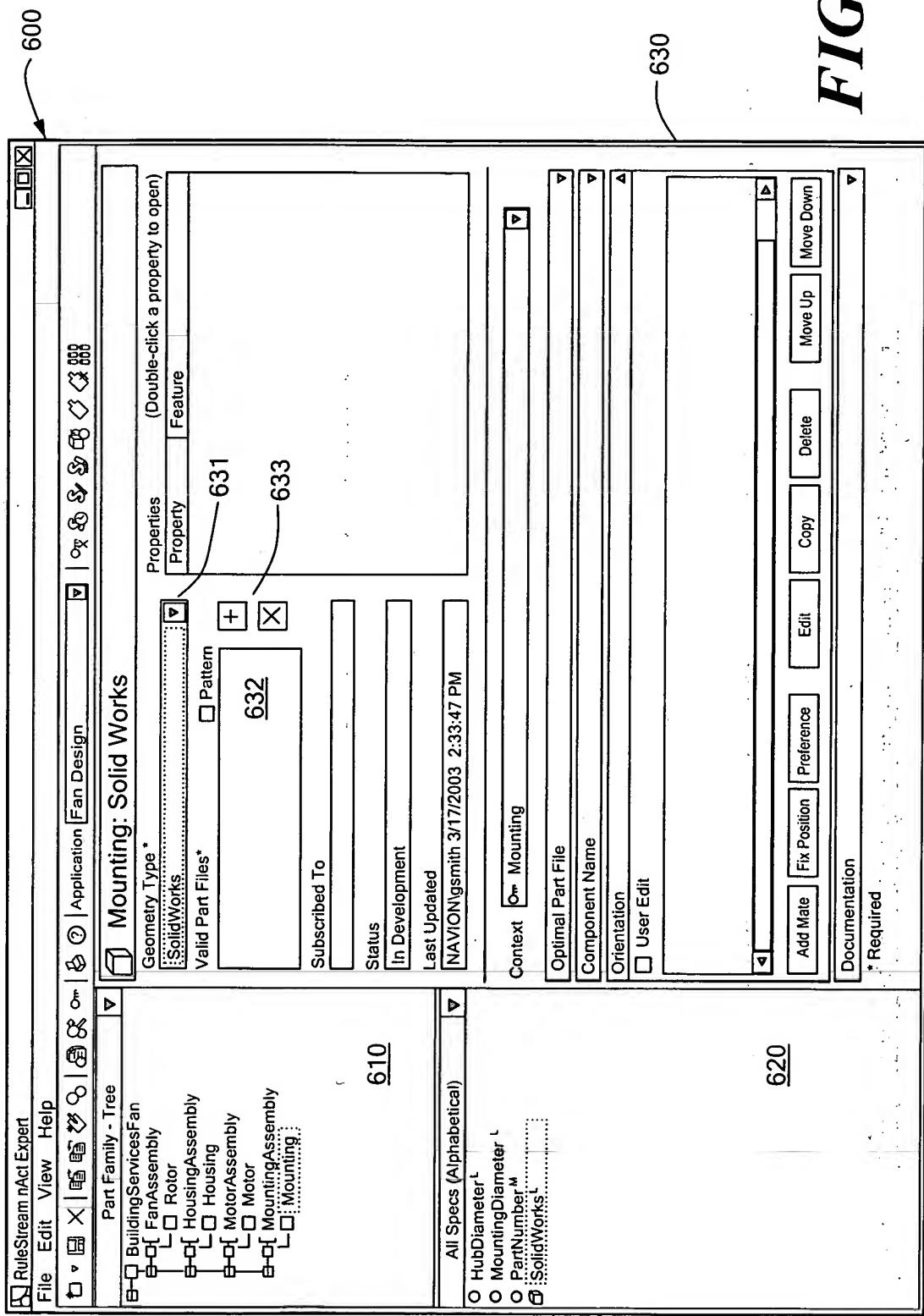


FIG. 6

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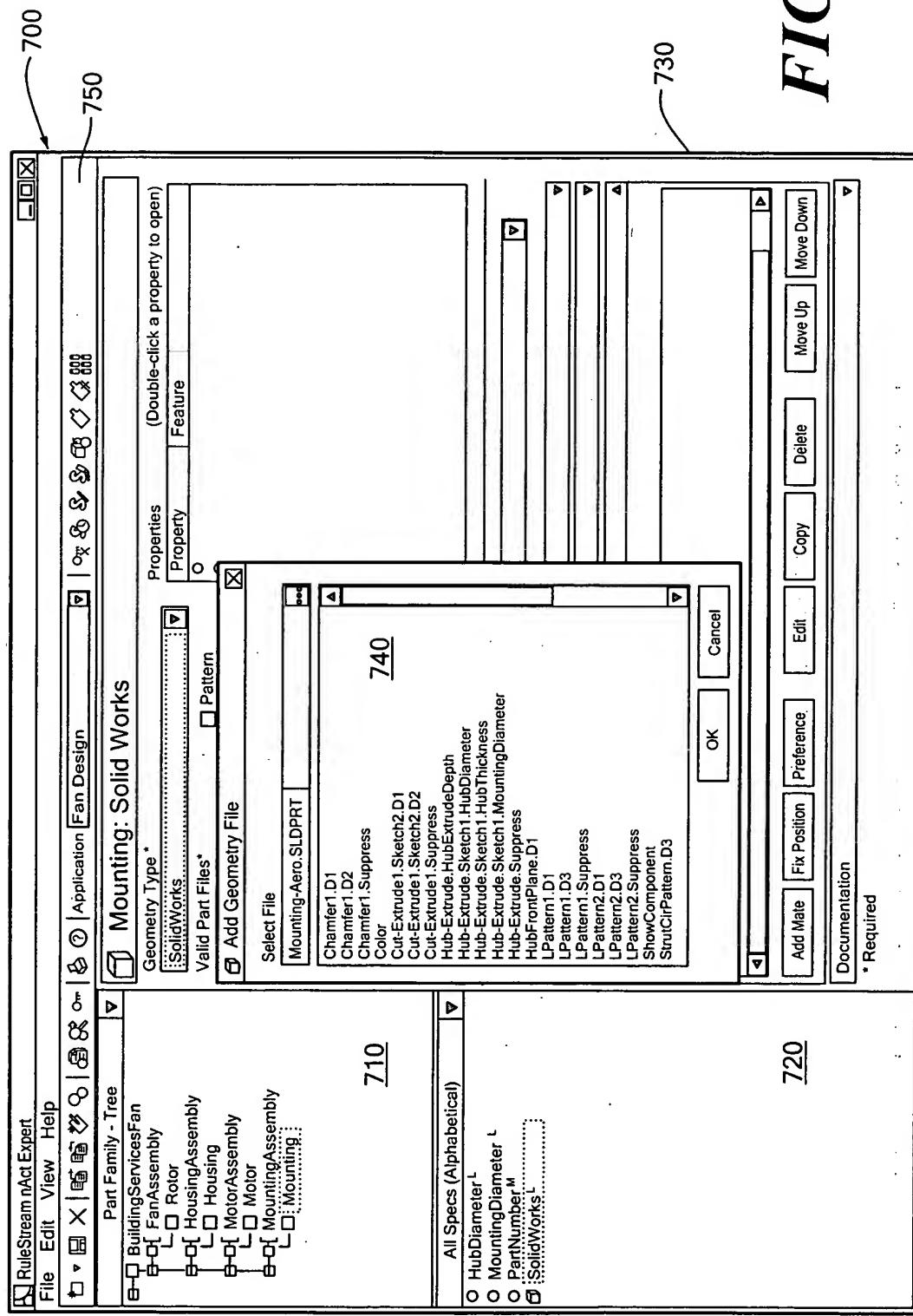


FIG. 7

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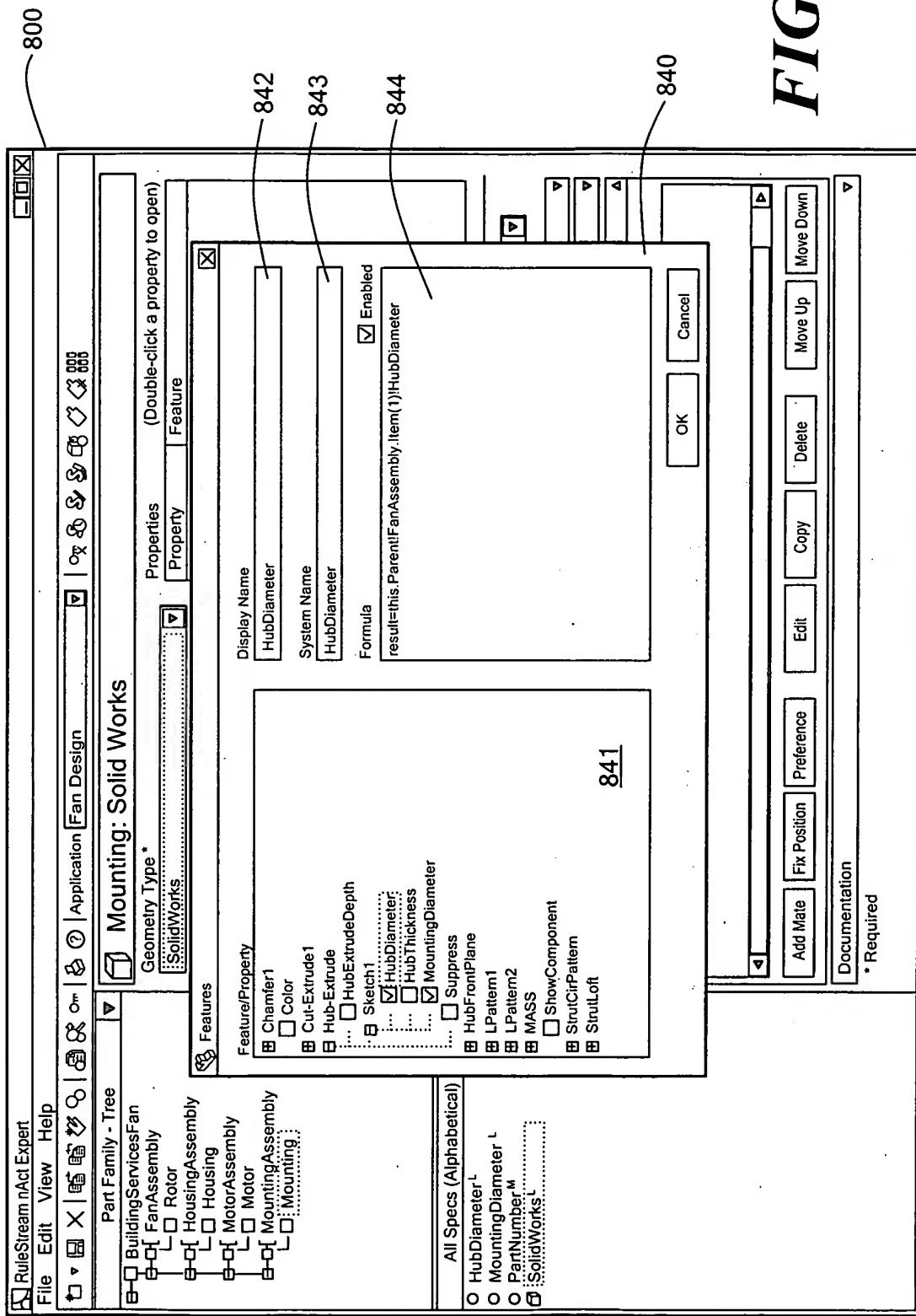


FIG. 8

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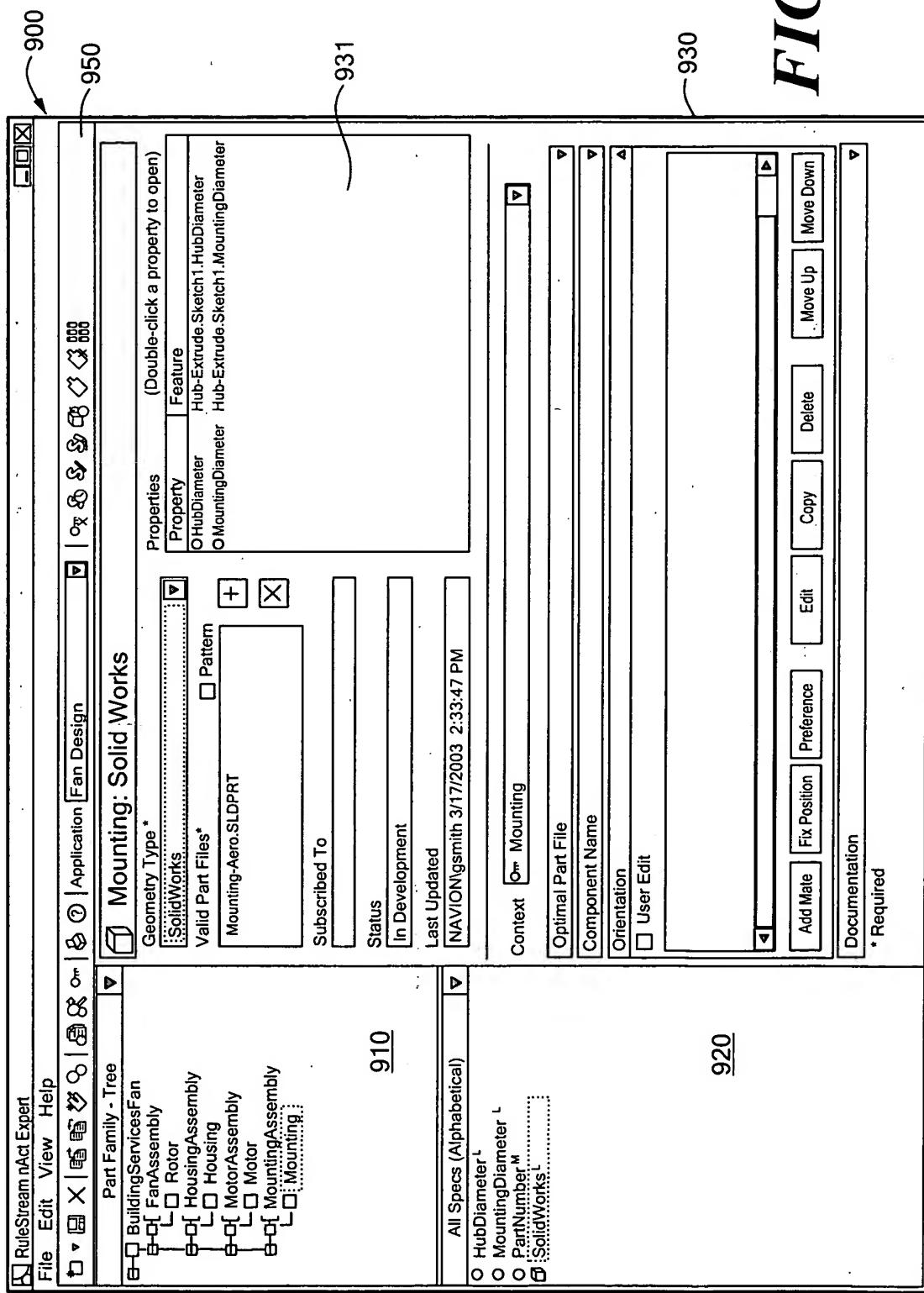


FIG. 9

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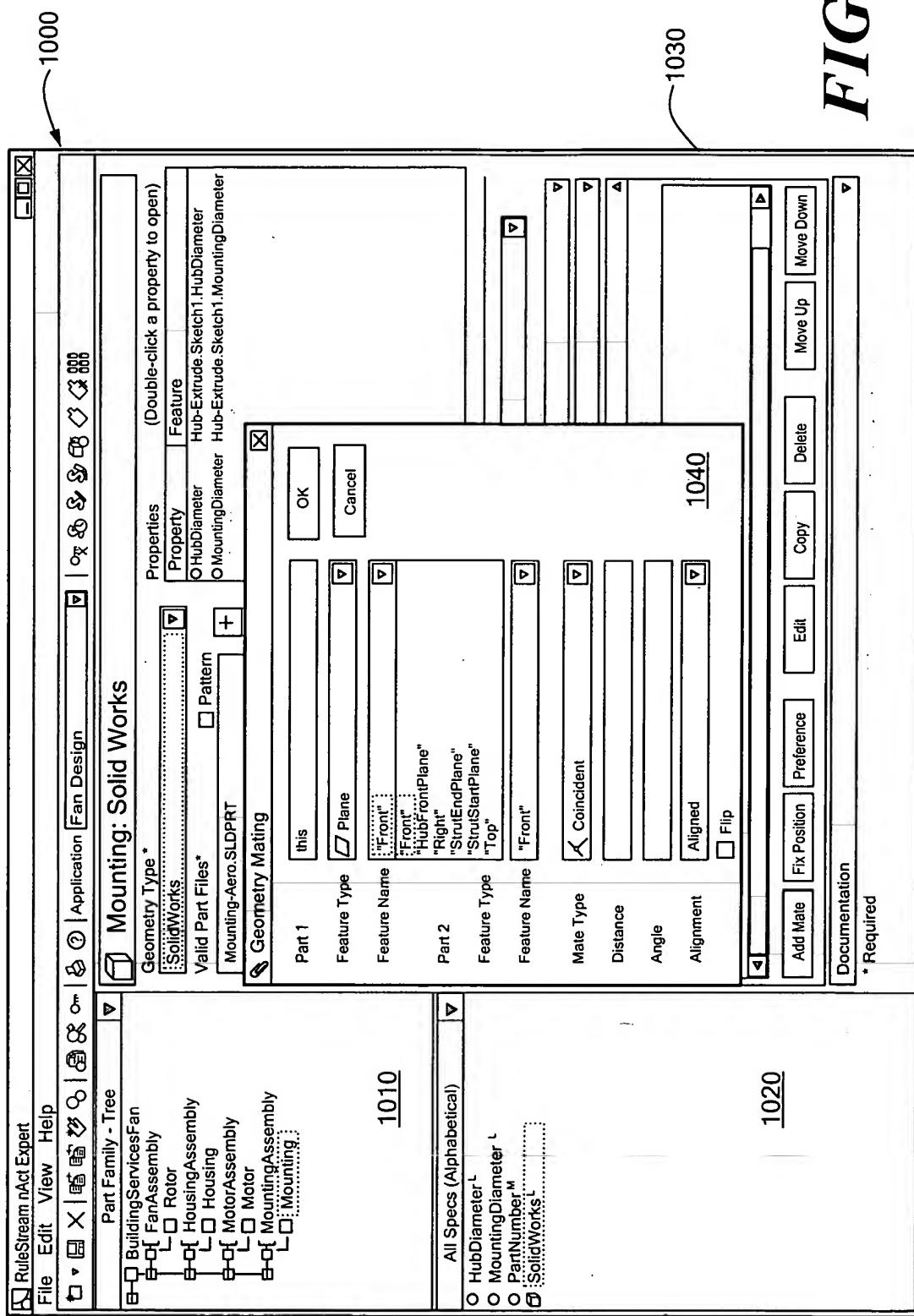


FIG. 10

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The screenshot shows the RuleStream Act Expert software interface. At the top, there's a menu bar with File, Edit, View, Help, and a toolbar with icons for opening files, saving, and other operations. Below the toolbar is a title bar for "Mounting: Solid Works".

Part Family - Tree:

- BuildingServicesFan
 - FanAssembly
 - Rotor
 - HousingAssembly
 - Housing
 - MotorAssembly
 - Motor
 - MountingAssembly
 - Mounting

Properties:

Property	(Double-click a property to open)
HubDiameter	Feature
MountingDiameter	Hub-Extrude, Sketch1.HubDiameter
Mounting	Hub-Extrude, Sketch1.MountingDiameter

Mounting-Aero.SLDPPRT

Subscribed To: (empty)

Status: In Development

Last Updated: NAVIONGsmith 3/17/2003 2:33:47 PM

Context: Mounting

Optimal Part File: (empty)

Component Name: (empty)

Orientation: (empty)

User Edit: (checkbox)

Notes:

```
AddMate this, "PLANE", "Front", this.parent(HousingAssembly(1), "PLANE", "Front", swMateCOINCIDENT, swMateAlignALIGNED, FALSE, AddMate this, "PLANE", "Right", this.parent(HousingAssembly(1), "PLANE", "Right", swMateCOINCIDENT, swMateAlignALIGNED, FALSE, AddMate this, "PLANE", "Top", this.parent(HousingAssembly(1), "PLANE", "Top", swMateCOINCIDENT, swMateAlignALIGNED, FALSE,
```

Buttons:

- Add Mate
- Fix Position
- Preference
- Edit
- Copy
- Delete
- Move Up
- Move Down

Documentation: * Required

Callouts:

- A curved arrow labeled "1100" points to the "Mounting" node in the Part Family tree.
- A curved arrow labeled "1110" points to the "Mounting" node in the "Mounting-Aero.SLDPPRT" section.
- A curved arrow labeled "1131" points to the "Mounting" node in the "Context" section.
- A curved arrow labeled "1120" points to the "Mounting" node in the "Notes" section.
- A curved arrow labeled "1130" points to the "Mounting" node in the "Buttons" section.

FIG. 11

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File Edit View Help		Application [Fan Design]	
<input type="checkbox"/> RuleStream nAct Expert		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Part Family - Tree		<input type="checkbox"/> BuildingServicesFan: FanArea	
<ul style="list-style-type: none"> <input type="checkbox"/> BuildingServicesFan <input type="checkbox"/> FanAssembly <ul style="list-style-type: none"> <input type="checkbox"/> Rotor <input type="checkbox"/> HousingAssembly <input type="checkbox"/> Housing <input type="checkbox"/> MotorAssembly <input type="checkbox"/> Motor <ul style="list-style-type: none"> <input type="checkbox"/> MountingAssembly <input type="checkbox"/> Mounting 		<input type="checkbox"/> Subscribed to	
		<input type="checkbox"/> Description	
		<input type="checkbox"/> Knowledge Source	
		<input type="checkbox"/> Data Type*	
		<input type="checkbox"/> Double	
		<input type="checkbox"/> Units	
		<input type="checkbox"/> $m^2(\text{metres}^2)$	
		<input type="checkbox"/> Status	
		<input type="checkbox"/> Released	
		<input type="checkbox"/> Last Updated	
		<input type="checkbox"/> GROGAN@ibrogan 8/22/2002 10:53:22 AM	
		<input type="checkbox"/> Requirements	
		<input type="checkbox"/> Context	
		<input type="checkbox"/> BuildingServicesFan	
		<input type="checkbox"/> Formula	
		<input type="checkbox"/> Auto Revert	
		<input type="checkbox"/> Follow Part Number	
		<input type="checkbox"/> If this!FanDiameter > 0 Then	
		result = 3.141 * (this!FanDiameter / 2)^2	
		<input type="checkbox"/> Else	
		result = 0	
		<input type="checkbox"/> Else	
		<input type="checkbox"/> User Interface	
		<input type="checkbox"/> Valid Values	
		<input type="checkbox"/> When Changed	
		<input type="checkbox"/> Database Constraint	
		<input type="checkbox"/> Documentation	
		<input type="checkbox"/> *Required	
<input type="checkbox"/> Density		<input type="checkbox"/> FanArea	
<input type="checkbox"/> FanAssembly		<input type="checkbox"/> FanAssembly	
<input type="checkbox"/> FanDiameter		<input type="checkbox"/> FanDiameter	
<input type="checkbox"/> FanPressure		<input type="checkbox"/> FanPressure	
<input type="checkbox"/> FrequentStartStop		<input type="checkbox"/> FrequentStartStop	
<input type="checkbox"/> HousingAssembly		<input type="checkbox"/> HousingAssembly	
<input type="checkbox"/> MotorAssembly		<input type="checkbox"/> MotorAssembly	
<input type="checkbox"/> MountingAssembly		<input type="checkbox"/> MountingAssembly	
<input type="checkbox"/> PartNumber		<input type="checkbox"/> PartNumber	
<input type="checkbox"/> SolidWorks		<input type="checkbox"/> SolidWorks	
<input type="checkbox"/> SpecifiedSpeed		<input type="checkbox"/> SpecifiedSpeed	
<input type="checkbox"/> SquareFlange		<input type="checkbox"/> SquareFlange	
<input type="checkbox"/> VolumeFlowRate		<input type="checkbox"/> VolumeFlowRate	

1200

1230

1240

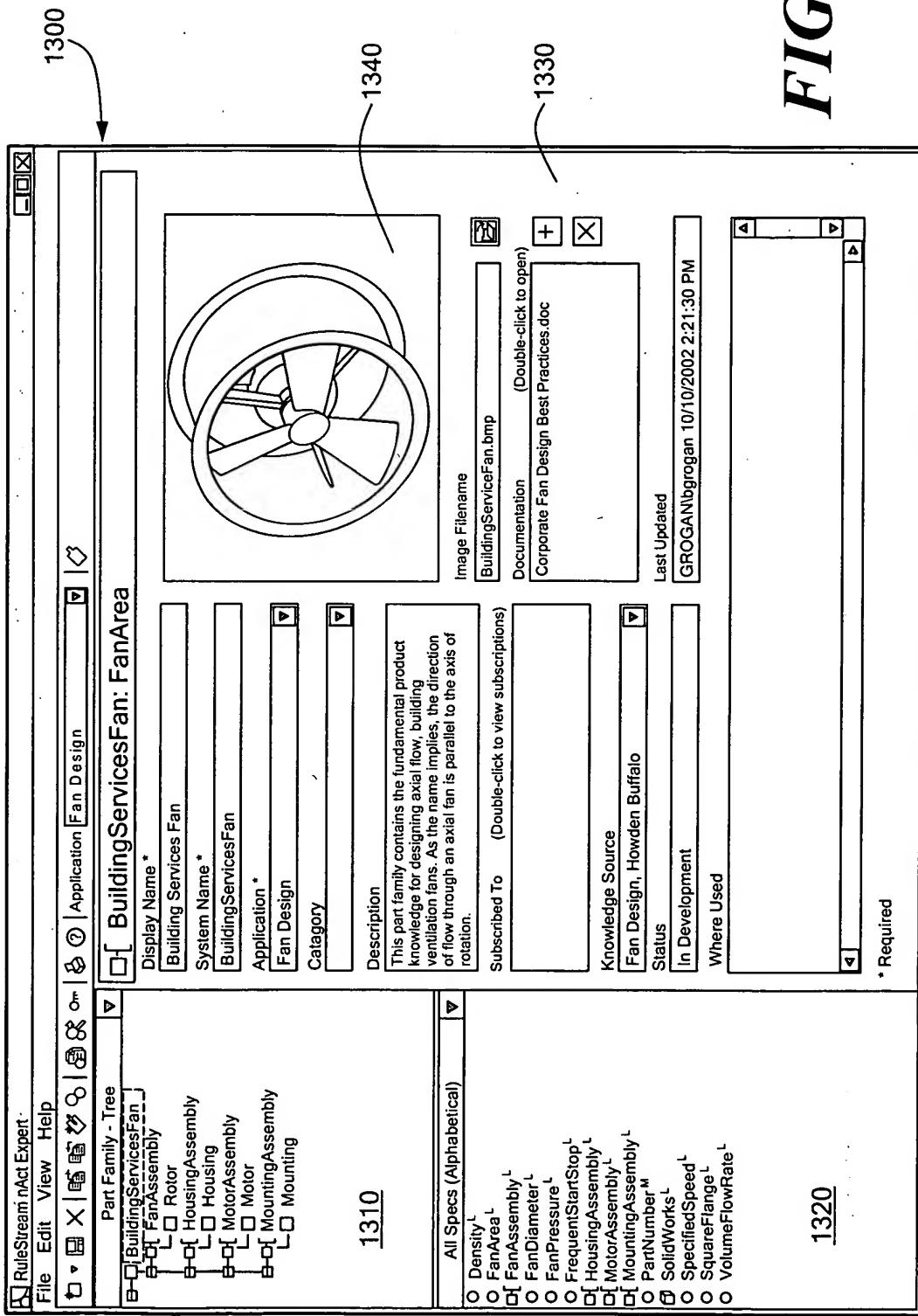
1210

1220

FIG. 12

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FIG. 13



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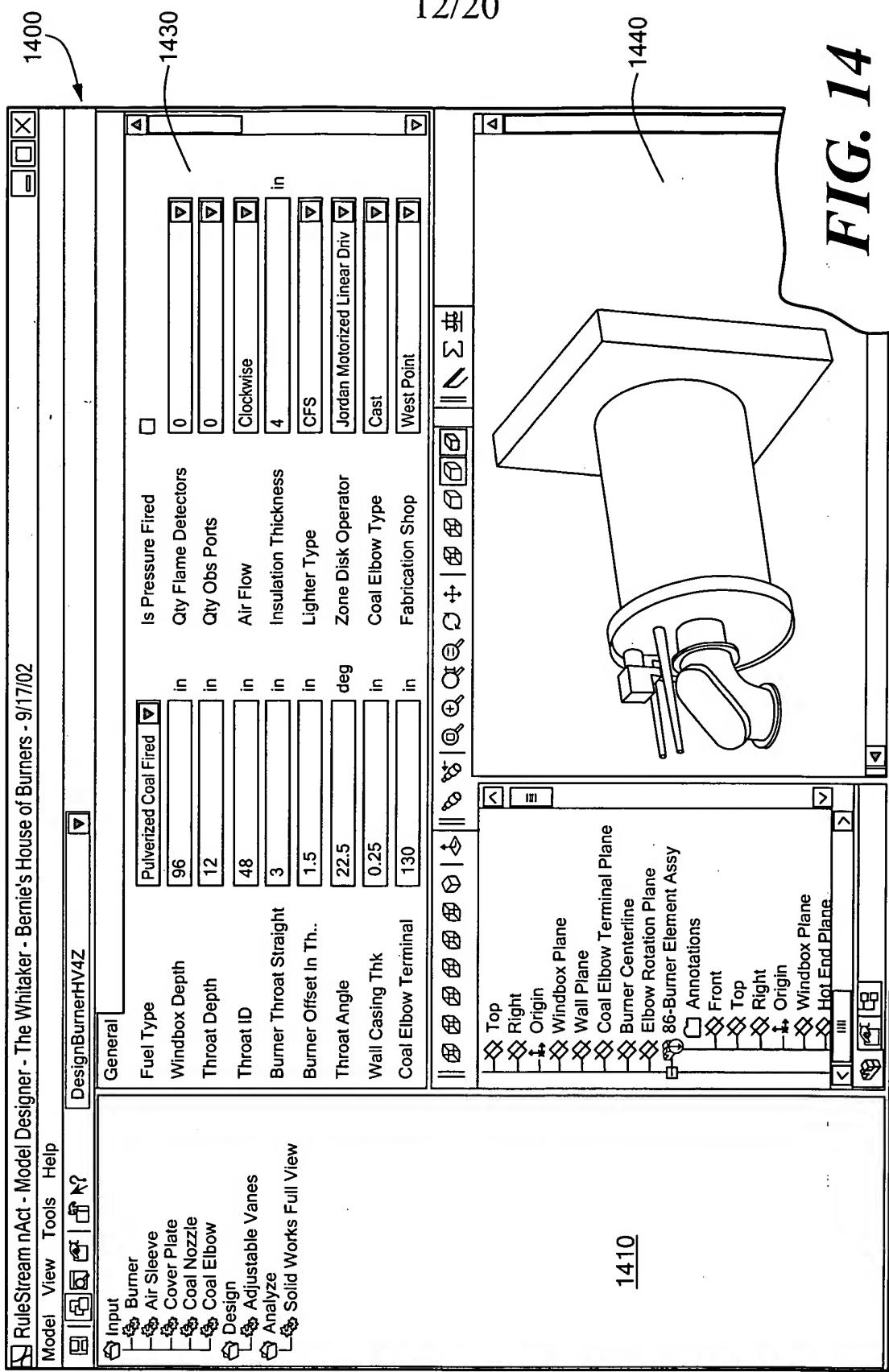


FIG. 14

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The screenshot shows the RuleStream nAct interface for 'DesignBurnerHV4Z'. The top menu bar includes Model, View, Tools, Help, and a toolbar with icons for Save, Open, and Help. The main window has tabs for General, Input, and Analyze.

General Tab:

Fuel Type	Pulverized Coal Fired
Air Flow	Clockwise
Insulation Thickness	4 in
Is Pressure Fired	<input type="checkbox"/> 1530
Coal Elbow Termin..	<input type="checkbox"/> 130 in
Windbox Depth	96 in
Throat Angle	22.5 deg
Throat ID Existing	48 in
Throat ID New	48 in

Input Tab:

Burner	<input type="checkbox"/>
Air Sleeve	<input type="checkbox"/>
Cover Plate	<input type="checkbox"/>
Coal Nozzle	<input type="checkbox"/>
Lighter	<input type="checkbox"/>
Coal Elbow	<input type="checkbox"/>
Design	<input type="checkbox"/>
Burner Optim	<input type="checkbox"/>
Adjustable Va	<input type="checkbox"/>
Adjustable Va	<input type="checkbox"/>
Adjustable Va	<input type="checkbox"/>
Fixed Vanes O	<input type="checkbox"/>
Fixed Vanes In	<input type="checkbox"/>

Analyze Tab:

Solid Works F	<input type="checkbox"/>
---------------	--------------------------

Properties View (Top Right):

Property	Value
Air Flow	Clockwise
Burner Offset	1.8125
Coal Elbow Ter	130
Coat Elbow Typ	Cast
Current Date	1/2/2003
Current Process	Design Eng
Customer ID	0
Customer Name	Burner buy
Fuel Type	Pulvanized
Insulation Thic	4
Is Pressure Fin	False
Name	DesignBurn
Obs Parts Fuh	False
Part Fam	

Properties View (Bottom Right):

Property	Value
Annotations	<input type="checkbox"/>
Lighting	<input type="checkbox"/>
Front	<input type="checkbox"/>
Top	<input type="checkbox"/>
Right	<input type="checkbox"/>
Origin	<input type="checkbox"/>
Equations	<input type="checkbox"/>
Windbox Plane	<input type="checkbox"/>
Wall Plane	<input type="checkbox"/>
Coal Elbow Terminal	<input type="checkbox"/>
Burner Centerline	<input type="checkbox"/>
Elbow Rotation Plane	<input type="checkbox"/>
Windbox Graphics<1>	<input type="checkbox"/>
rope packing<1>	<input type="checkbox"/>

Diagram View (Bottom Center):

1510

1550

1520

1540

FIG. 15

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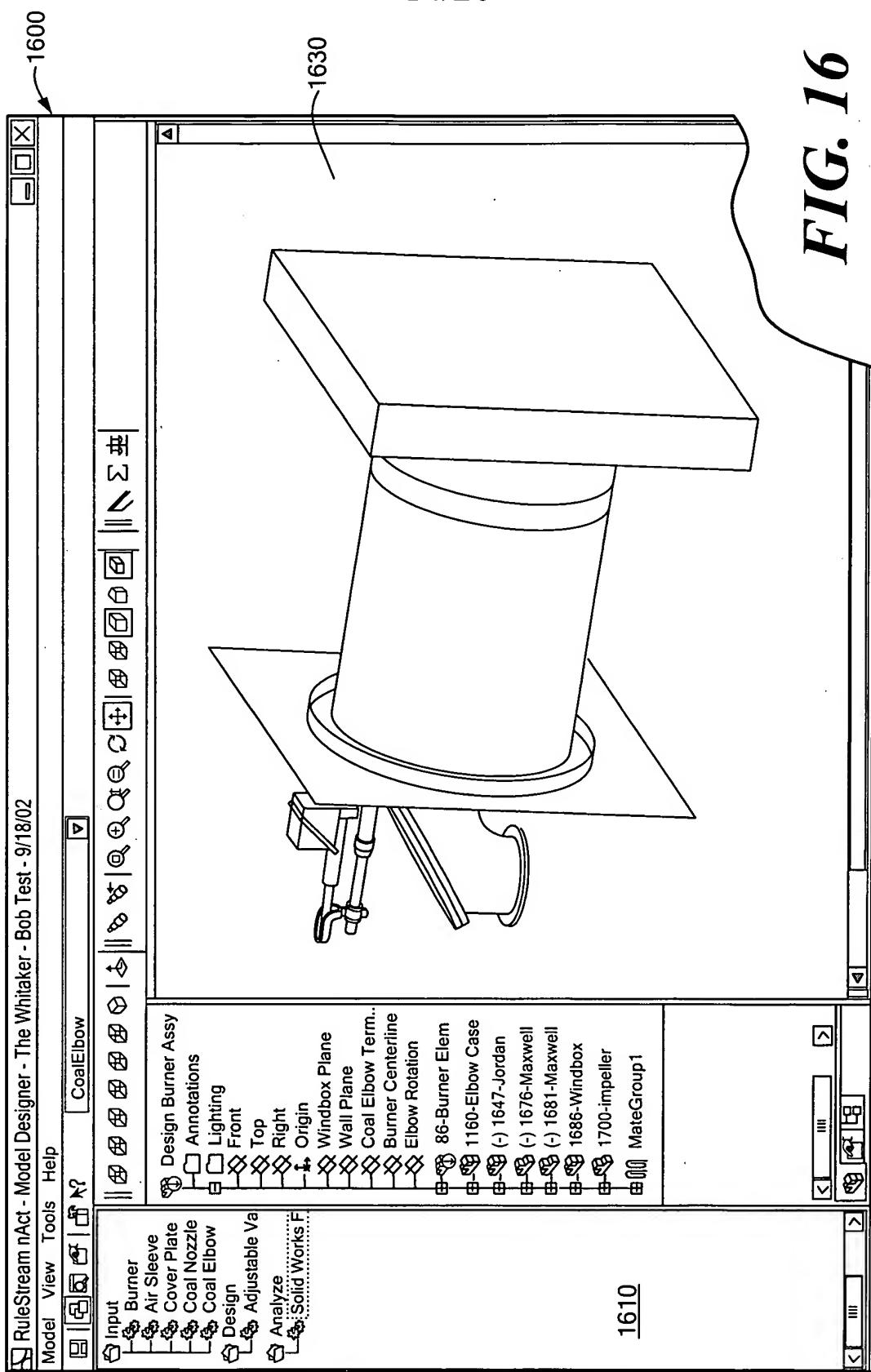


FIG. 16

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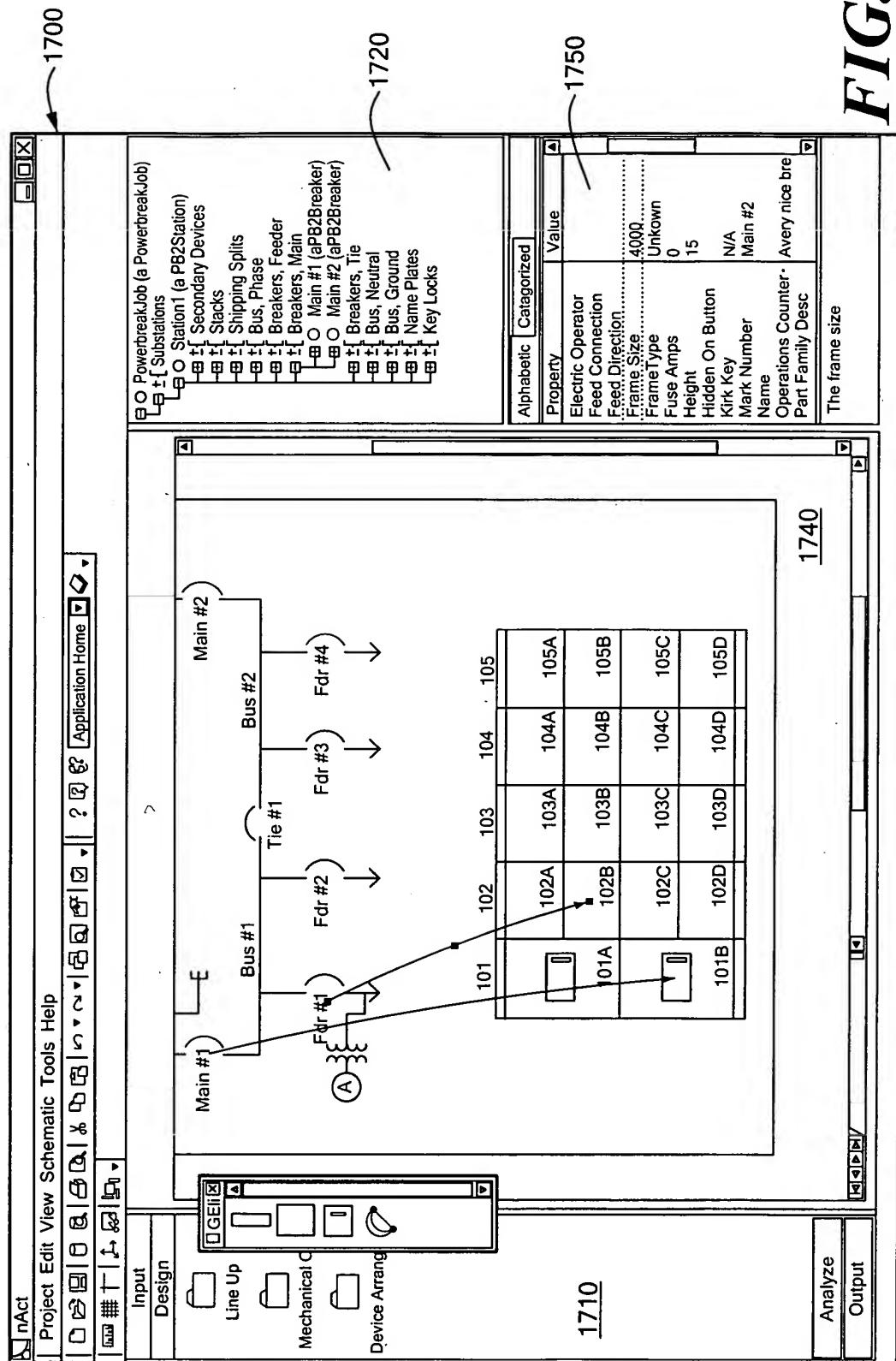


FIG. 17

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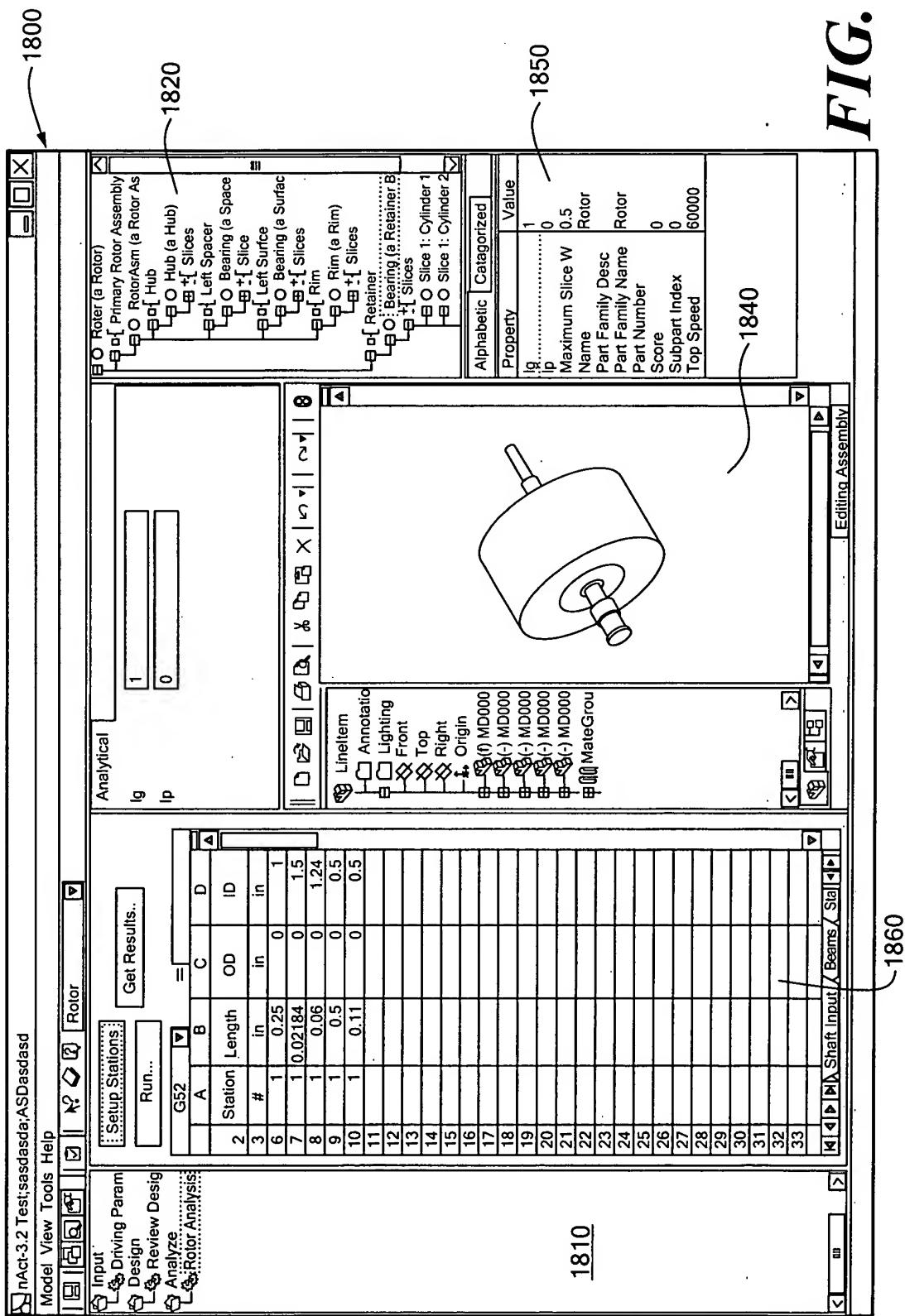


FIG. 18

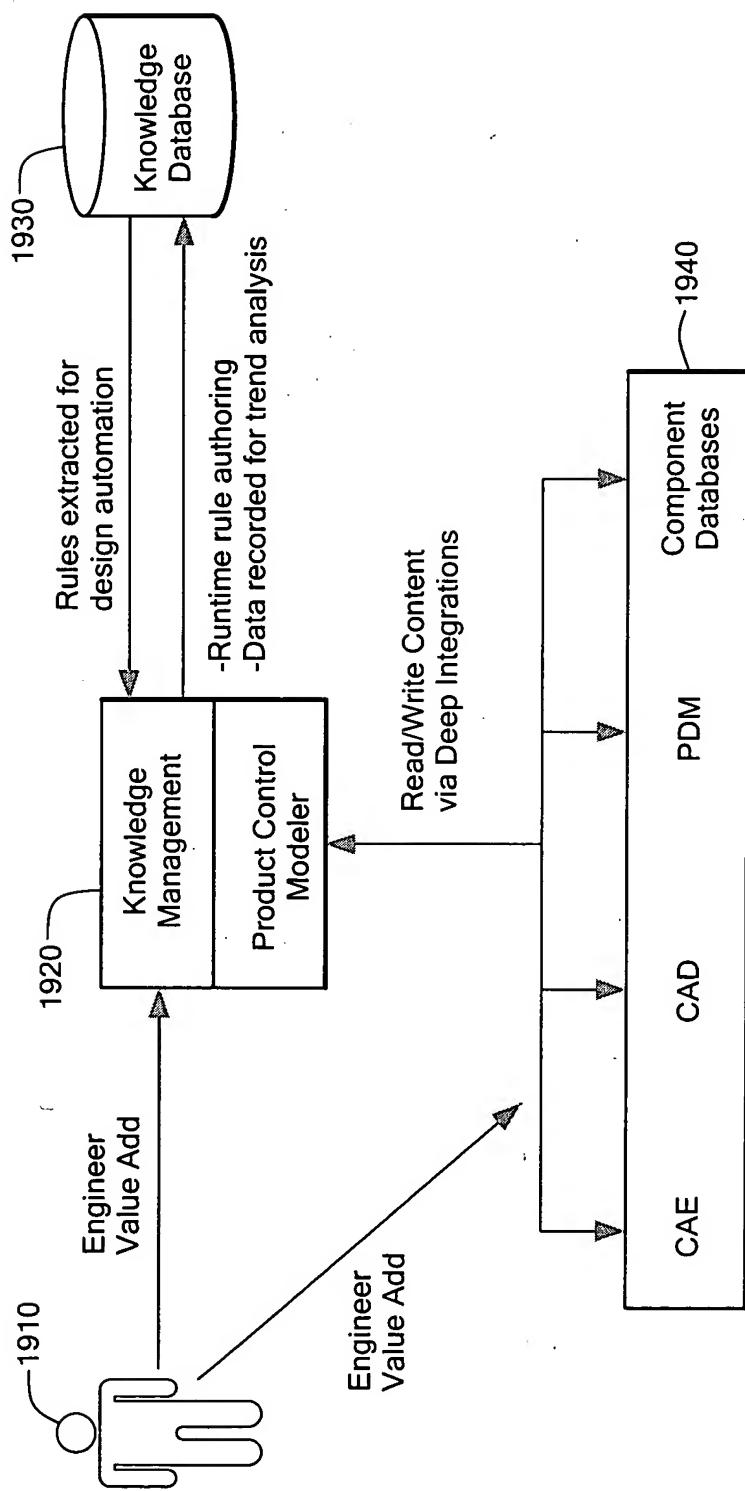


FIG. 19

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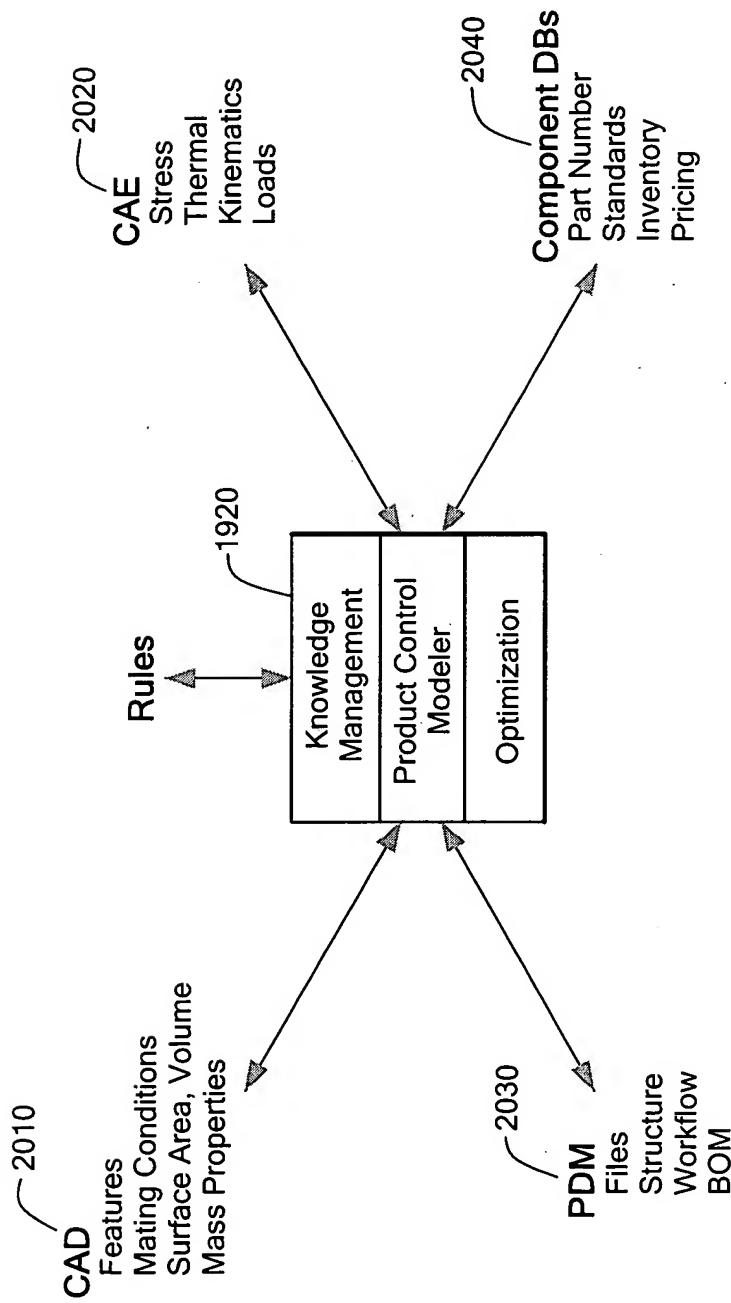
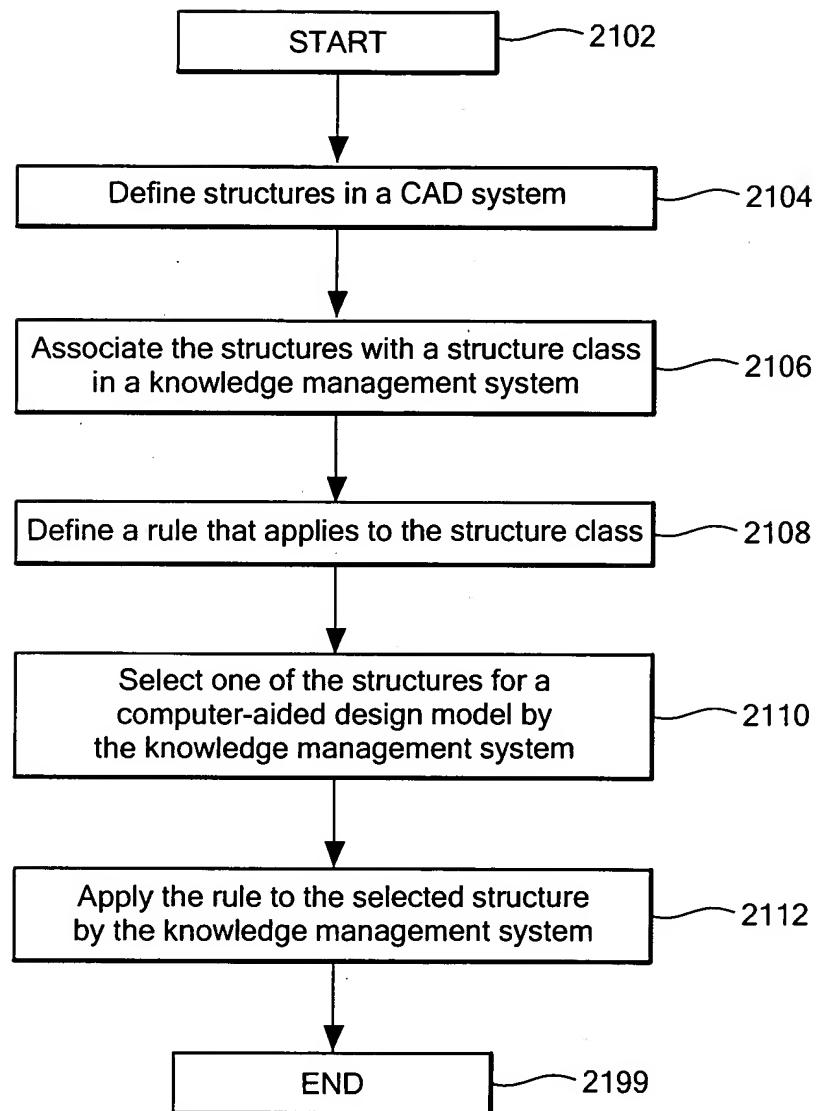


FIG. 20

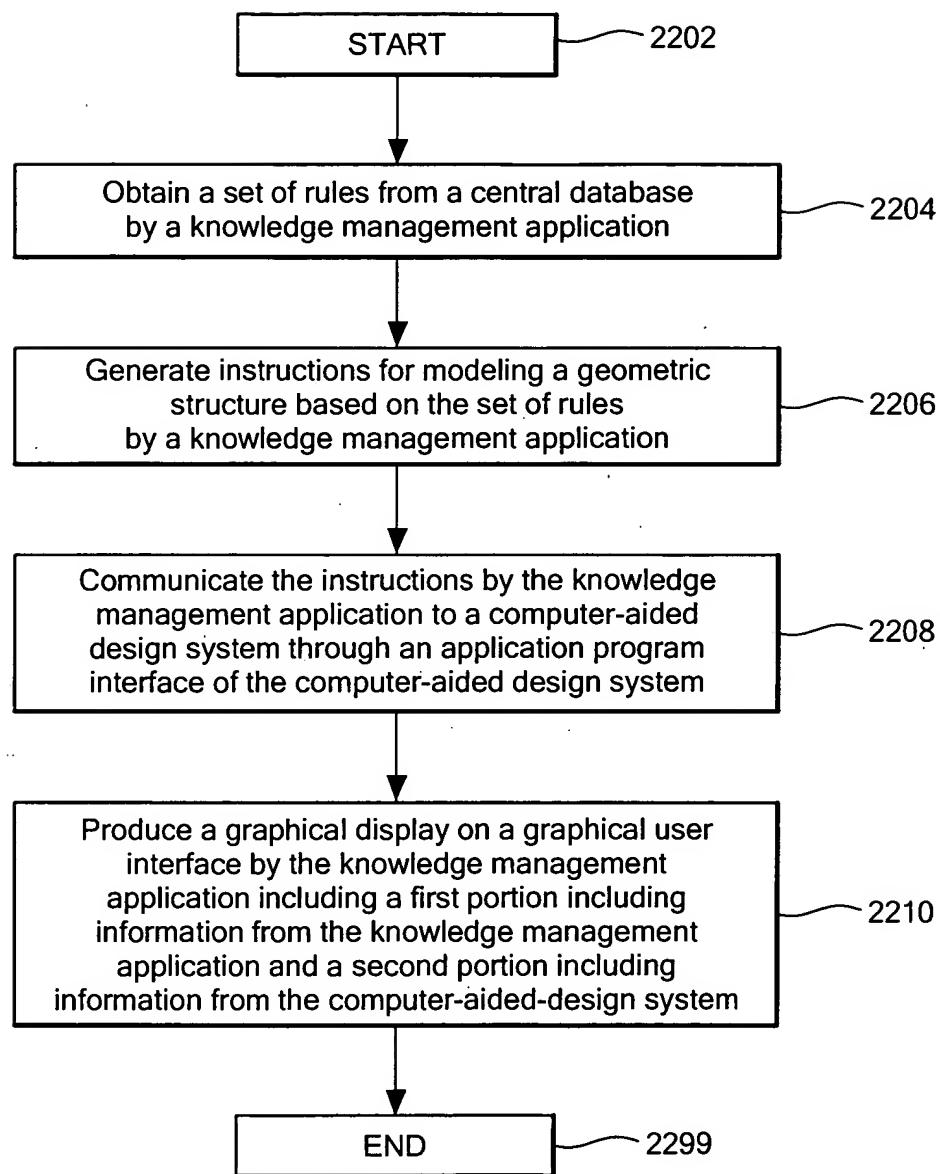
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FIG. 21

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2200

FIG. 22